Using Obesity-Related Medical Claims Cost Analysis to Influence Obesity Prevention & Intervention Approaches in Worksite Environments

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Why Use Medical Claims Analysis as a Diagnostic and Planning Strategy?

- **Claims data records provide data on a lot of people**

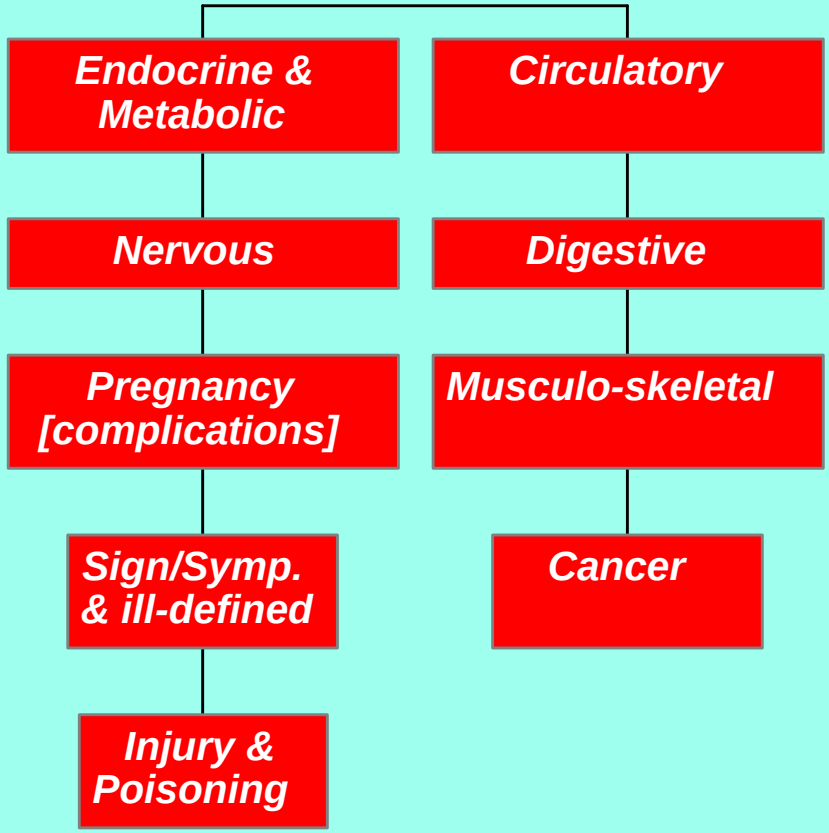
- **Selected medical conditions can be easily identified via DRG and ICD**

- **Claims data records reflect the real demand for services**

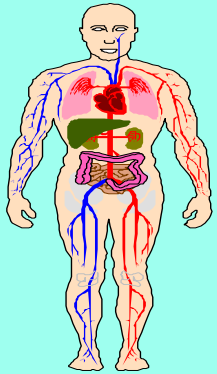
- **Claims data are quantifiable [# claims & $ payments]- can be tracked year-to-year for evaluation purposes**

What Conditions are Related to Overweight & Obesity?

Condition	BMI*
Overweight	25-29.9
Obesity	30+



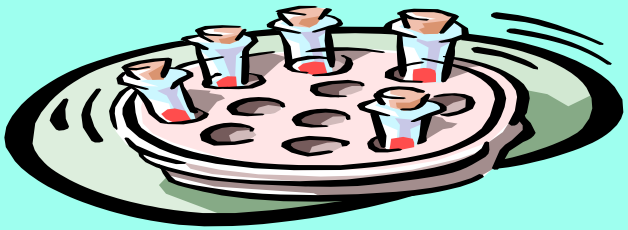
•*Nat'l Heart, Lung, and Blood Institute, Clinical Guidelines. Dept. of HHS, 1998.*



CIRCULATORY

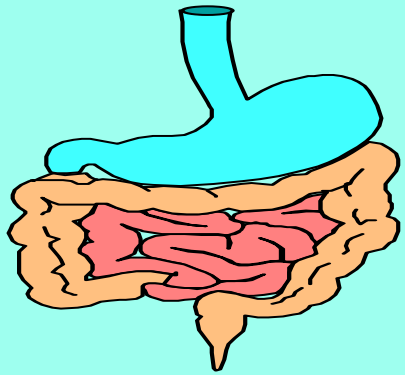
Condition	DRG	ICD
• Cardiovascular	103-112	402-405
	120-145	412-414.9
• Hypertension	135	401
• Deep vein thrombosis	128	437.6
• Chronic venous insuffic.		459.81

Source: American Obesity Association. *Comments of the American Obesity Association on Healthy People 2010*. [www.obesity.org/AOA_HP2010.htm]



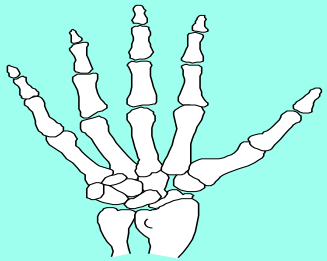
CANCER (Neoplasm)

Condition	DRG	ICD
• Breast (women)	274-275	174-175
• Breast (men)	274-275	175.9
• Esophageal/gastric	154-156	150.1 - 151.0
• Colo-rectal	148-149	153.0-154.1
	172-173	
	179	
• Endometrial	354-355	182.0-182.8
	357-359	
• Renal cell	318-319	189.0-189.1



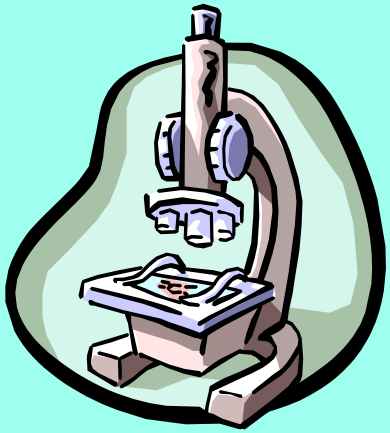
DIGESTIVE

Condition	DRG	ICD
• Gallbladder	195-198	575.0-575.9
• Liver disease	199-203	570.0-573.9
• End stage renal disease	316-317	585-586
• Biliary and alcoholic pancreatitis	193-194 204 207-208	577.0-577.1



MUSCULO-SKELETAL

Condition	DRG	ICD
• Osteo-arthritis	221-222 237	715.0-715.9
• Rheum. arthritis	242 244 245-246	714
• Low back pain	243	724.1-724.5
• Sprain/strain of back		847.9

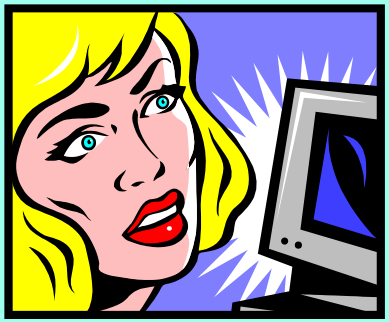


ENDOCRINE & METABOLIC

Condition	DRG	ICD
• Diabetes	294	250.0-250.9
• Gout		274.0-274.9
• Impaired immune response	488-490	279.0-279.9

NERVOUS

Condition	DRG	ICD
• Carpal tunnel syndrome	6	354.0-354.1
• Pain		307.8-307.80



PREGNANCY [COMPLICATIONS]

Condition	DRG	ICD
• Obstetric and gynecologic complications	354 358 366 368 370 372	

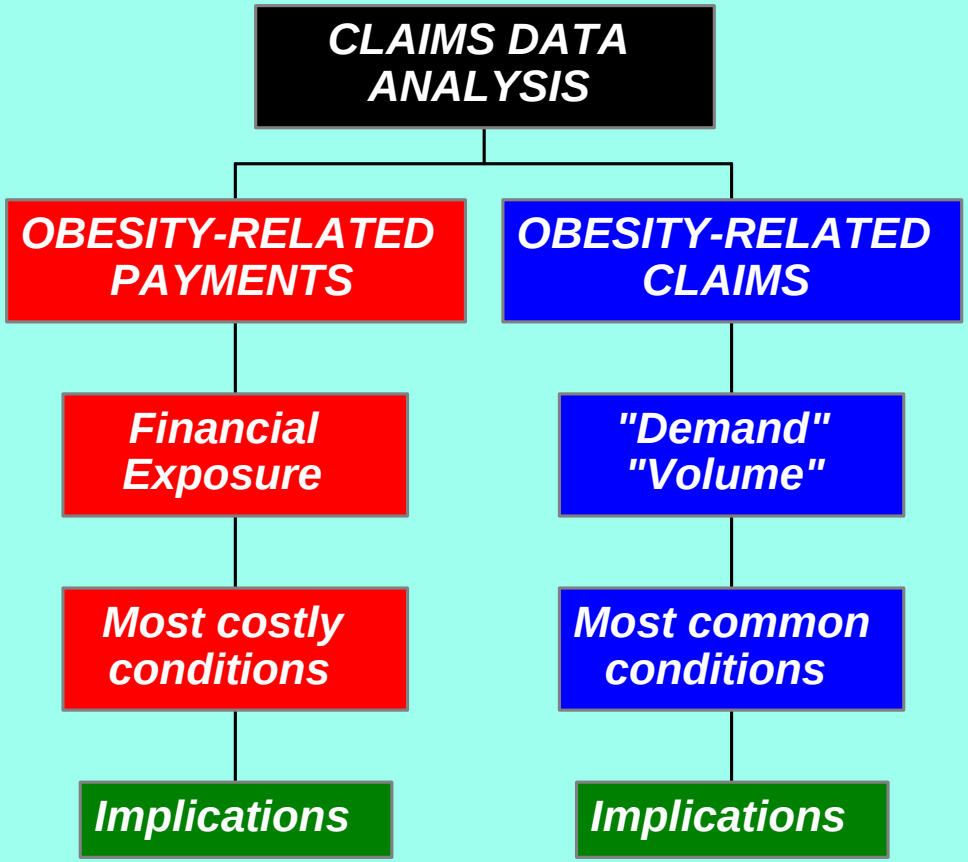
SIGNS/SYMPTOMS/ILL-DEFINED

Condition	DRG	ICD
• Impaired respiratory function	87-88	518.5-519
• Sleep apnea		780.5-780.57
• Urinary stress incontinence		788.3-788.39

INJURY & POISONING

Condition	DRG	ICD
• Hip Fracture	236	808 808.1 820

Conduct a Worksite Diagnostic Analysis



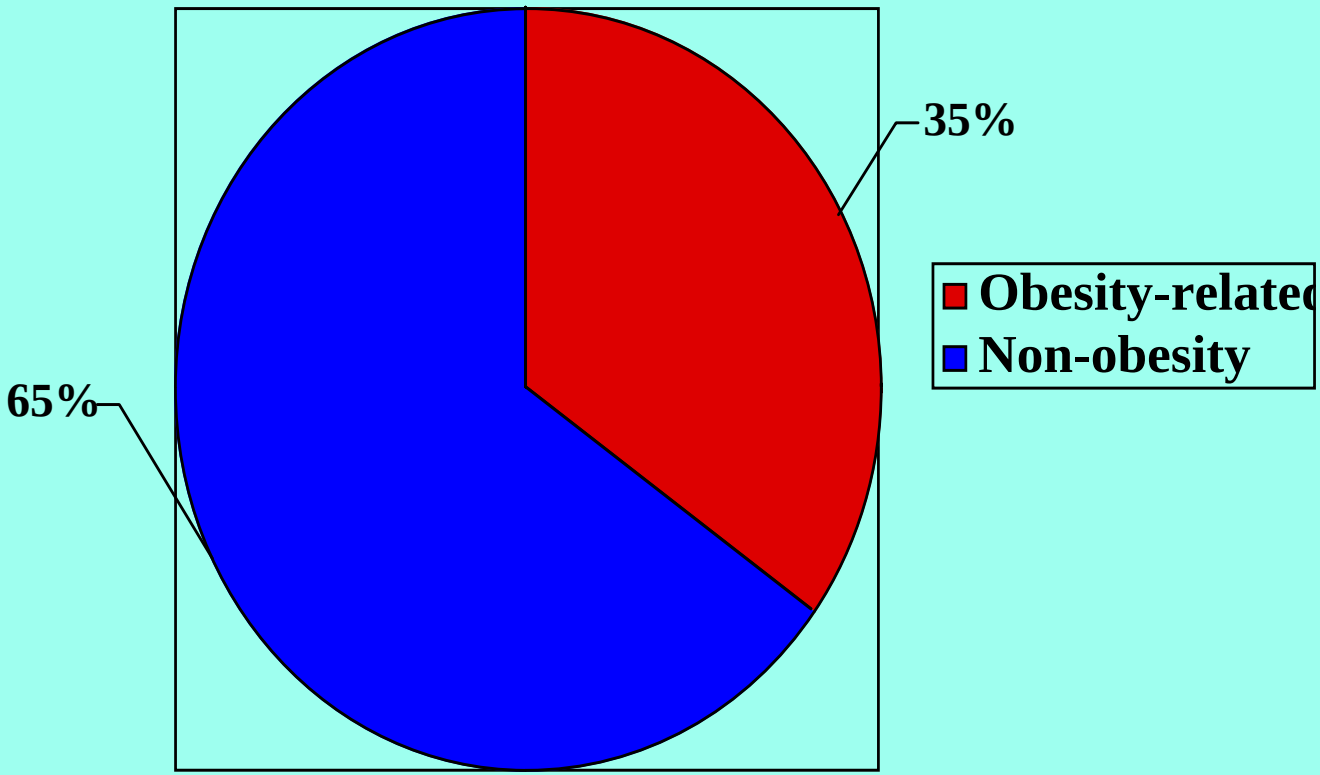
ASSESS OVERALL RISK TO IDENTIFY MAJOR TARGETS

Compare Per Capita Claims vs. Payment Tiers

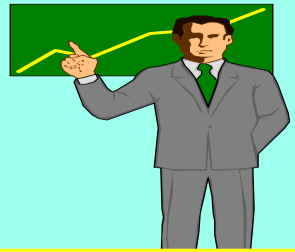
	High ($1K)	Mid ($500-1k)	Low (<$500)
High (>5)		**CIRCULATORY**	
Moderate (3-5)	***DIGESTIVE***	***MUS-SKELETAL***	
Low (0-2)	**CANCER NERVOUS PREG. COMP INJURY**	***ENDO-METAB***	***S/S/ILL***

SOURCE: HMA database >20 million adults. 1998-2003.

Compare Obesity-Specific Claim Costs vs. Other Claim Costs…to Determine Level of Obesity Risk in Your Organization



Calculating Obesity Costs Among Adults in a Target Population

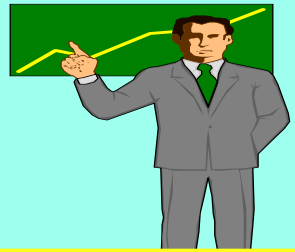


Cost Unit	Cost	Description
A. Medical	$ 21.87	Ave. annual med. cost per capita due to phys. obesity
	x ___	*Insert # of adults in target population*
	$ ----	Total medical care cost of obesity
B. Workers' Comp	$ 4.67	Ave. annual workers' comp cost per worker
	x ___	*Insert # of working adults in target population*
	$ -----	Total workers' comp costs tied to obesity
C. Lost Product.	___	*List # of working adults in target population*
	x ___	*Median compensation paid annually per worker*
	x __.%	*List % of workers who are obese*
	x .1262	% of annual workload lost to obesity
	$ -----	Total lost productivity cost of obesity

Add totals from "A" + "B" + "C" = Total cost of obesity in target population

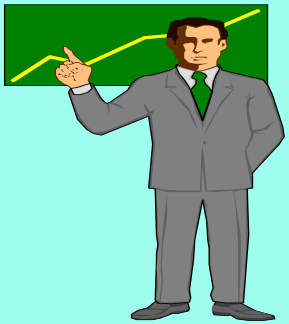
Source: Health Management Associates, New Bern, NC.

Calculating Physical Inactivity Costs Among Adults in a Target Population



Cost Unit	Cost	Description
A. Medical	**$ 45.32**	**Ave. annual med. cost per capita due to phys. inactivity**
	x___	***Insert # of adults in target population***
	$ ----	**Total medical care cost of physical inactivity**
B. Workers' Comp	**$ 8.82**	**Ave. annual workers' comp cost per worker**
	x___	***Insert # of working adults in target population***
	$ -----	**Total workers' comp costs tied to physical inactivity**
C. Lost Product.	**___**	***List # of working adults in target population***
	x ___	***Median compensation paid annually per worker***
	x __ .%	***List % of workers who are physically inactive***
	x .079	**% of annual workload lost to physical inactivity**
	$ -----	**Total lost productivity cost of physical inactivity**

Add totals from "A" + "B" + "C" = Total cost of physical inactivity in target population



Calculating the Cost of Physical Inactivity Among Adults in Your Organization

- **A non-proprietary, non-commercial tool**
- **Scheduled for public use in June 2004**
- **Funding by The Robert Wood Johnson Foundation**
- **Using 7 States' medical care, workers' comp, and lost productivity costs**
- **For more information, contact:**

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CLAIMS DATA ANALYSIS

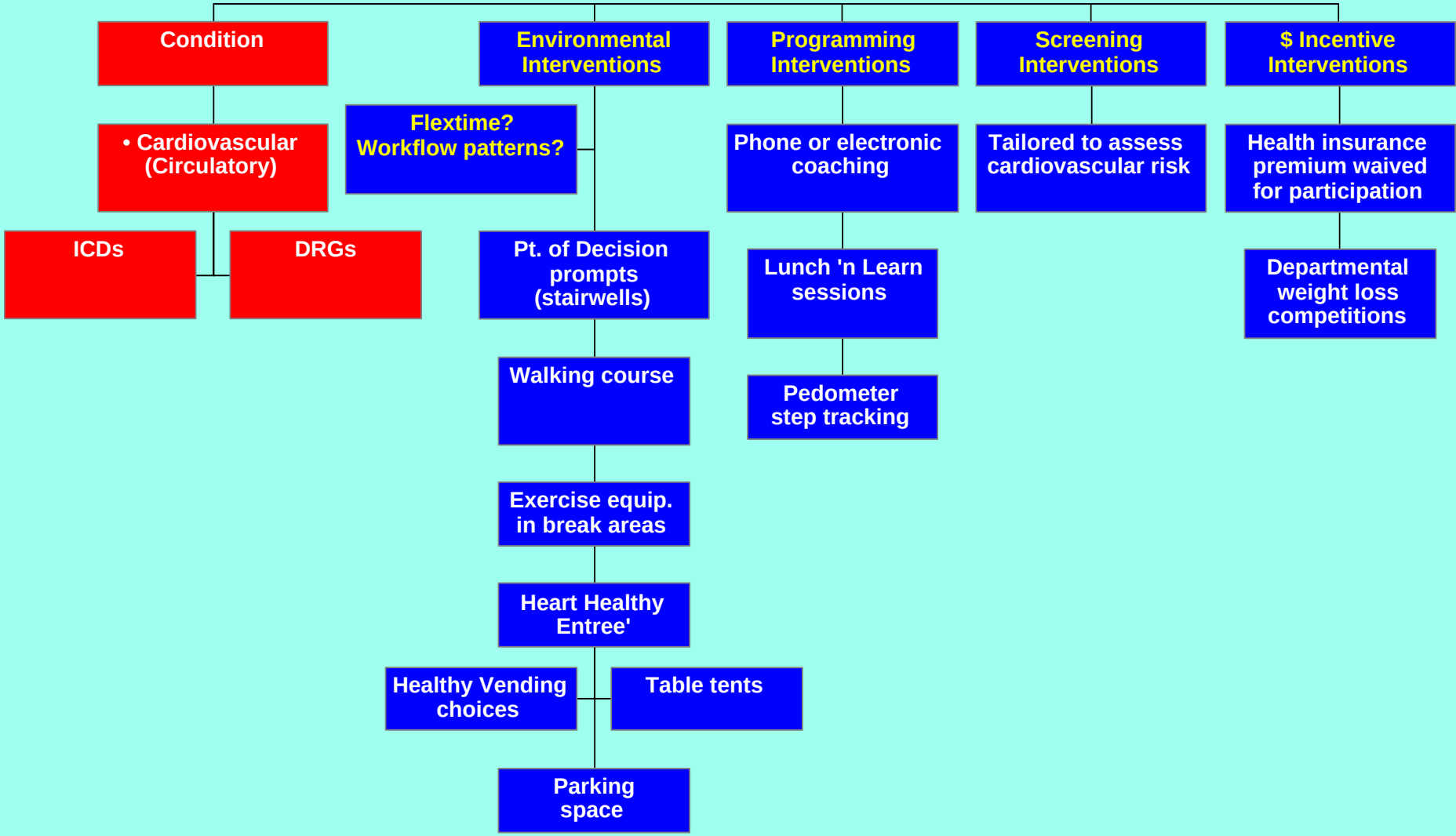
OBESITY-RELATED PAYMENTS

- Financial Exposure
- Most costly conditions
- Implications

OBESITY-RELATED CLAIMS

- "Demand" "Volume"
- Most common conditions
- Implications

Use Findings to Create Worksite-Specific Interventions



Keys for Success…

- **Gather data on obesity claims & costs**
- **Identify major claim and cost drivers**
- **Assess cultural opportunities and barriers for action**
- **Establish an action plan with measurable/quality assurance indicators**
- **Implement action plan and monitor changes; revise accordingly**